Remarks

Claims 1 and 13 have been amended to define SOFC and PEN cell by reciting "solid oxide fuel cell (SOFC)" and "positive-electrolyte-negative cell (PEN)", respectively. Support for these amendments may be found at page 1 line 23 and page 2 line 1. No new matter is added thereby.

35 USC § 102(e) and 35 USC § 103 (a)

The examiner has rejected claims 1, 3, 8, 9-14, and 17 as anticipated under 35 USC § 102(e) by Haltiner el al. (US 2003/0235746A1) and has further rejected claims 2, 4-7, 16, and 18-21 as unpatentable under 35 USC § 103(a) over Haltiner el al. in view of Carolan et al (US Pat. No. 5,750,279) and James et al. (US Pat. No. 5,766,789 A).

Previously, the applicant submitted the declaration of Kerry Meinhardt under 37 CFR 1.131, demonstrating that the invention as claimed was conceived and reduced to practice prior to June 24, 2002, the filing date and first priority date of the Haltiner el al. reference. Since the present application was filed prior to the first publication of the Haltiner el al. reference, and since the Haltiner el al. reference was first published within 12 months of the applicant's earliest US filing date, under 35 USC § 102(a), the applicant requested that the examiner remove the Haltiner el al. reference from consideration of the examination of the present invention. The applicant further contended that absent the Haltiner el al. reference, there is no prima facie case for obviousness under 35 USC § 103(a) or anticipation under 35 USC § 102(e). Accordingly, the applicant respectfully

requested that the examiner remove his rejections under 35 USC § 102(e) and 35 USC § 103(a), and allow the claims to issue.

In the examiner's office action of October 4, 2006, the examiner contended that the declaration of Kerry Meinhardt was insufficient to show the applicant's diligence in reducing the invention to practice. Specifically, the examiner contended that the declaration of Kerry Meinhardt did not account for activities taken during the entire time period under consideration, and that the declaration of Kerry Meinhardt did not "appear to the examiner to reflect enough details of the instant application to show how the invention was reduced to practice. For example, the materials used in several parts of the instant application, i,e. the anode and cathode, are not mentioned in the affidavit."

Accordingly, enclosed herewith the applicant has submitted the affidavit of inventor K. Scott Weil. Dr. Weil's affidavit establishes the following:

Dr. Weil is a researcher and scientist at the Pacific Northwest National Laboratory and has been since 6/1/2000.

Dr. Weil's principal research has been in fuel cell technologies and more particularly in interconnect and sealing technology.

As a part of the program of the laboratory Dr. Weil associated himself with other companies in engaging in research and development projects in various areas of technology. In these ventures information regarding technologies is exchanged frequently.

One of the companies with which Dr. Weil has engaged in various projects has been Delphi Corporation, the assignee of publication no. US

2003/0235746 A1 (the cited reference), which has been cited by the Examiner as an anticipating reference under 35 USC §102(e). Dr. Weil's work with Delphi Corporation on the subject matter of the cited reference started at least as early as May 21, 2001 and has continued since that time.

Dr. Weil's review of the cited reference, as well as disclosures that were made in private presentations to Delphi prior to filing date of the cited reference show that the material which was described in this cited reference was invented by Dr. Weil and his team and provided to Delphi's representatives. Therefore, the disclosure which has been cited by the Examiner is not truly the work of another but is the work of the parties which are named in the currently pending application.

In support of these statements, Dr. Weil has attached to his statement Exhibit A, a true and correct copy of the previously submitted declaration of Kerry Meinhardt which includes as an attachment thereto a copy of the internal invention disclosure record that was made with regard to the present invention. As indicated earlier, this date of disclosure is November of 2000. This is significantly earlier than the June 24, 2002 filing date of the Haltiner reference. In the interim period of time between the completion of this invention report and the filing of the application Dr. Weil's team and Dr. Weil were engaged in a variety of activities related to the reducing of the concept in this invention disclosure to practice.

For the time period between September of 2000 and June 24, 2002 Dr. Weil and Dr. Weil's team were engaged in various activities related to the further modifications of the design, this included modifications and improvement to interconnect and frame design, sealing design, cell design, and overall stack design.

Also during this period and extending for a time period thereafter, Dr. Weil and Dr. Weil's team were engaged in various activities in reducing the invention to practice including interconnect and frame development and fabrication; sealing development and fabrication; cell development and fabrication; and stack development, fabrication, and testing.

The principal feature that is described and claimed in the cited reference is the presence of a frame for receiving a fuel cell element with a central aperture for exposure of either the anode or the cathode. This is different from the cell to edge concept which was taught and described in earlier embodiments in the prior art. The presence of anodes and cathodes in fuel cells was already known in the art. The features that are described in the cited reference are also shown at least as far back as May 21, 2000 in various PNNL recordings including the lab notebook of Kerry Meinhardt #57464.

In addition, this information was provided in various private presentations to Delphi. These disclosures include dated powerpoint (ppt) slides, and presentation papers. True and correct printed out copies of one of these disclosures are attached to as Exhibit B1 of Dr. Weil's sworn declaration. In

addition, other presentations of subject matter found in the Haltiner reference were also made to Delphi.

- Interconnect Review.ppt; author Weil; dated 7/6/00
- Exploded view of cell.ppt; author Weil; dated 6/29/00
- NETL 10-27-00; author Weil; dated 10/25/00
- TWP 11-10-00.doc; author Weil; dated 11/10/00
- LAC 11-14-00.DOC author Weil; dated 11/14/00
- Future component work 10-18-00.doc; author Weil; dated 11/15/00
- Scott's fuel cell assy.ppt; author Weil; dated 11/16/00
- Pics of stack #3; author Weil; dated 7/20/01
- Picture frame design.rtf; author Weil dated 10/4/00

These papers show that the materials in the cited reference were in fact first invented by Dr. Weil and his team prior to the filing date of the cited reference and the invention that is set forth in the cited reference is in fact the applicant's original invention.

In addition to these features, other items which are set out in the cited reference are also inventions taught by the inventors of the current application. For example, a fuel cell module that also includes a fusible seal on an outer surface of the module to seal the adjacent module in a fuel cell stack assembly process is a taught in the prior art including U.S. Pat. No. 6,532,769, which was includes K.D. Meinhardt, who is also a named inventor on the present application.

Applying the applicable standards to the facts as established by Dr. Weil's sworn declaration and the attached exhibits, it is clear that the Examiner should remove the cited reference as prior art because this reference cites the Applicant's own information and as such does not qualify as prior art under 35 USC §102(e). The earliest date the cited

reference can be considered to have been reduced to practice on the evidence before the examiner is the June 24, 2002, the filing date and first priority date of the Haltiner el al. reference. By that time, not only had the Applicant reduced the invention to practice, the applicant had further described both the invention and its reduction to practice in correspondence to the assignee of Haltiner el al.

The critical period for diligence for a first conceiver but second reducer begins not at the time of conception of the first conceiver but just prior to the entry in the field of the party who was first to reduce to practice and continues until the first conceiver reduces to practice. *Hull v. Davenport*, 90 F.2d 103, 105, 33 USPQ 506, 508 (CCPA 1937) ("lack of diligence from the time of conception to the time immediately preceding the conception date of the second conceiver is not regarded as of importance except as it may have a bearing upon his subsequent acts"). What serves as the entry date into the field of a first reducer is dependent upon what is being relied on by the first reducer, e.g., conception plus reasonable diligence to reduction to practice (*Fritsch v. Lin*, 21 USPQ2d 1731, 1734 (Bd. Pat. App. & Inter. 1991), *Emery v. Ronden*, 188 USPQ 264, 268 (Bd. Pat. Inter. 1974)) Not only has the applicant established diligence and actual reduction to practice prior to the expiration of this critical period, the applicant has in fact established that the cited reference was, in fact, copied from the applicant's same conception and reduction to practice.

The applicant has also shown that the work relied upon to show reasonable diligence was directly related to the reduction to practice of the invention in issue. *Naber* v. *Cricchi*, 567 F.2d 382, 384, 196 USPQ 294, 296 (CCPA 1977), *cert. denied*, 439 U.S.

826 (1978). >See also Scott v. Koyama, 281 F.3d 1243, 1248-49, 61 USPQ2d 1856, 1859 (Fed. Cir. 2002) "An inventor should also be able to rely on work on closely related inventions as support for diligence toward the reduction to practice on an invention in issue." Ginos v. Nedelec, 220 USPO 831, 836 (Bd. Pat. Inter. 1983) (work on other closely related compounds that were considered to be part of the same invention and which were included as part of a grandparent application). "The work relied upon must be directed to attaining a reduction to practice of the subject matter of the counts. It is not sufficient that the activity relied on concerns related subject matter." Gunn v. Bosch, 181 USPQ 758, 761 (Bd. Pat. Inter. 1973). In this case, the applicant has established, not only with sworn testimony but also with dated records, that the principal feature that is described and claimed in the cited reference (a frame for receiving a fuel cell element with a central aperture for exposure of either the anode or the cathode) was reduced to practice by the applicant prior to the expiration of the critical period. The features that are described in the cited reference are also shown at least as far back as May 21, 2000 in various PNNL recordings including the lab notebook of Kerry Meinhardt #57464 and in various private presentations to Delphi. These disclosures include dated powerpoint (ppt) slides, and presentation papers. True and correct printed out copies of one of these disclosures are attached to as Exhibit B1 of Dr. Weil's sworn declaration.

These papers show that the materials in the cited reference were in fact first invented by Dr. Weil and his team prior to the filing date of the cited reference and the invention that is set forth in the cited reference is the applicant's original invention.

Appl. No. 10/609,069
Preliminary Amendment filed April 4, 2007 concurrently with Request for Continuing Examination

Conclusion

Applicant has made an earnest attempt to place the above referenced application in condition for allowance and action toward that end is respectfully requested. Should the Examiner have any further observations or comments, she is invited to contact the undersigned for resolution.

Respectfully submitted,

Douglas E. McKinley, Jr. Reg. No. 40,280

PO Box 202 Richland, WA 99352 Voice (509) 628-0809 Fax (509) 628-2307

The undersigned hereby certifies that the forgoing Preliminary Amendment dated April 4, 2007 in responsive to the final office action of October 4, 2006 together with the 37 CFR 1.132 declaration of Scott Weil w/ attachment, a fee sheet (PTO form SB/22), a request for continuing examination (PTO form SB/30), and a return postcard are being deposited with the United States Postal Service as First Class Mail, postage prepaid, in an envelope addressed to

Mail Stop Non-Fee Amendment Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

on the date set forth below.

Douglas E. McKinley, Jr.

Reg. No. 40,280